

Special Issue

Lab-on-Chip Biosensors

Message from the Guest Editors

Lab-on-a-Chip (LoC) biosensors integrate microfluidics, nanotechnology, and biosensing into miniaturized platforms, revolutionizing biomedical diagnostics. They enable rapid, sensitive, and cost-effective biomolecule detection, advancing clinical diagnostics, environmental monitoring, and point-of-care testing. As decentralized healthcare and real-time disease monitoring grow, LoC biosensors are crucial for personalized medicine, infectious disease detection, and biomedical research. Recent advancements in materials science, fabrication techniques, and AI integration have further enhanced their capabilities, making them indispensable for modern healthcare and biotechnology.

This Special Issue highlights cutting-edge developments in LoC biosensors, focusing on novel designs, fabrication methods, and applications. It bridges interdisciplinary research, showcasing state-of-the-art biosensing technologies and their impact. Topics include novel biosensor designs, biomedical diagnostics, AI integration, and wearable/implantable biosensors, aligning with the journal's focus on miniaturized systems and microfluidics.

Guest Editors

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About the Journal

Message from the Editor-in-Chief

Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

Editor-in-Chief

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